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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,251	01/30/2004	Ingo Schmitz	IF-F22	8152

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RICK MARTIN
PATENT LAW OFFICES OF RICK MARTIN, PC
416 COFFMAN STREET
LONGMONT, CO 80501

EXAMINER

JEFFERY, JOHN A

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/769,251

Applicant(s)

SCHMITZ, INGO

Examiner

John A. Jeffery

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040913.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Title of Invention

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Electric Hairdressing Device With Hair Curlers Detachably Placed Onto Heating Elements and Handle for Grasping the Curlers."

Disclosure Objections

The disclosure is objected to because of the following informalities:

On P. 8, line 25, "know" must be changed to "known." Appropriate correction is required.

Drawing Objections

The drawings are objected to because of the following informalities:

- (1) An additional cross sectional figure with proper hatching must be added to clearly show the hair curler's ceramic coating claimed in claim 15. Applicant is reminded to (1) use refractory hatching for the ceramic layer, and (2) assign a reference numeral to the layer to contrast it with the underlying structure.
- (2) The drawings are also objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electrically non-conducting surface coating on the hair curler finger (claim 10)

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must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

(3) The drawings filed 9/13/04 must be labeled "REPLACEMENT SHEET" in the top margin pursuant to 37 CFR 1.84(c).

(4) Figs. 1-5: Applicant must remove the arrowheads from the lead lines except to indicate generality. See 37 CFR 1.84(r).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

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Claims 2, 3/2, 4/2, 5/4/2, 6/2, 7/2, 8/7/2, 9/2, 10/9/2, 11/2, 12/2, 6/1, and 13-15¹ are objected to because of the following informalities:

Claim 2: In line 1, "the" must be changed to "each" and, in line 2, an apostrophe must be added after the last letter of "curlers."

Claim 6: In line 2, "elements are" must be changed to "element is." In line 4, "heating elements" must be changed to "at least one heating element" for consistency.

Claim 13: In line 2, "it" must be changed to "said hair curler." In line 3, "that it has" must be deleted for brevity.

Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

For the reasons set forth in Footnote 1 of this Office Action, claims 14 and 15 lack clarity even when read in light of the specification since (1) the preamble of claim 14 is inconsistent with the claim from which it depends, and (2) no antecedent basis exists for "the coating" in claim 15. For examination purposes, the examiner presumes

¹ Although claims 14 and 15 depend from claims 12 and 13 respectively, the examiner presumes such dependency was a typographical error. Because the preambles of claims 14 and 15 both recite "[h]air curler" and are consistent with the preamble of independent claim 13, the examiner presumes that

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that (1) claim 14 was intended to depend from claim 13, and (2) claim 15 was intended to depend from claim 14.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-15 are rejected under 35 USC 102(b) as being anticipated by Kampel et al (US 2004/0163662). Kampel et al (US 2004/0163662) discloses a hair curler consisting essentially of a body that absorbs heat (i.e., a "heat store body") and coated with a ceramic-containing paint 38. See Paras. 0044-0048. According to Paras. 0045-0046, the curler's ceramic coating not only radiates heat more evenly, but also results in a smooth outer surface.

Claim Rejections - 35 U.S.C. § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

applicant intended claim 14 to depend from claim 13. Moreover, the examiner presumes claim 15 was intended to depend from claim 14 to ensure proper antecedent basis for the coating.

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Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1, 3/1, 4/1, and 5/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635).

Nilsson (US 3,705,974) discloses an electric hairdressing device comprising several curlers 6 with heat storage material (col. 2, lines 46-48). The curlers can be detachably placed onto posts 8 that each contain an electric heating element 16. See Figs. 1-3.

The claims differ from Nilsson (US 3,705,974) in calling for an application handle for grasping and wrapping the curler, the handle comprising a pivotable hair curler finger. Providing handles to grasp curlers that are detachably mounted onto heated posts in a hairdressing appliance, however, is well known in the art. O'Brien et al (US 5,884,635), for example, discloses providing an "application handle" 80 with pivoting finger 23 that is adapted to grasp hair curlers 70 mounted on posts 75. See Figs. 1-4 and col. 3, lines 1-54. Note rods 30 and 40 that engage with corresponding curler receptacles 50 and 60. Such an arrangement allows the user to grasp and manipulate a heated curler without touching it. See col. 1, lines 19-25 and lines 47-52.

In view of O'Brien et al (US 5,884,635), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide an application handle that is adapted to grasp the curlers in the apparatus of Nilsson (US 3,705,974) to enable the user to grasp and manipulate a heated curler from the container without touching it thus preventing burning the user.

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Claims 2, 3/2, 4/2, 5/2, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635) and further in view of Kampel et al (US 2004/0163662). The claims differ from the previously cited prior art in calling for the curlers to have a smooth hair contact surface and an electrically non-conducting coating. But such coatings on hair curlers are well known in the art. Kampel et al (US 2004/0163662), for example, discloses a hair curler with a body that absorbs heat (i.e., a "heat store body") and coated with a ceramic-containing paint 38. See Paras. 0044-0048. According to Paras. 0045-0046, the curler's ceramic coating not only radiates heat more evenly, but also results in a smooth outer surface. Moreover, according to Para. 0046, such surface smoothness assists in hair styling, curling and texture of the hair while gripping it. In view of Kampel et al (US 2004/0163662), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a ceramic coating on the curlers in the previously described apparatus to radiate heat more evenly and provide a smooth outer surface to assist hair styling, curling and texture of the hair while gripping it.

Claim 6/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635) and further in view of Walter (US 3,858,029). The claim differs from the previously cited prior art in calling for the storage container to comprise a vapor generator. Vapor generators in hair curler heating appliances, however, are well known in the art. Walter (US 3,858,029), for example, discloses providing a vapor generator in conjunction with heated rods 14 onto which

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curlers 10 are detachably mounted. Such an arrangement enables heating the curlers both interiorly via the conducting posts and exteriorly via steam. See, e.g., col. 2, lines 37-43, col. 3, lines 15-55, and Figs. 1-4. In view of Walter (US 3,858,029), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a vapor generator in conjunction with the previously described apparatus to enable heating the curlers both interiorly via the conducting posts and exteriorly via steam.

Claim 6/2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635), Kampel et al (US 2004/0163662), and further in view of Walter (US 3,858,029). The claim differs from the previously cited prior art in calling for the storage container to comprise a vapor generator. Vapor generators in hair curler heating appliances, however, are well known in the art. Walter (US 3,858,029), for example, discloses providing a vapor generator in conjunction with heated rods 14 onto which curlers 10 are detachably mounted. Such an arrangement enables heating the curlers both interiorly via the conducting posts and exteriorly via steam. See, e.g., col. 2, lines 37-43, col. 3, lines 15-55, and Figs. 1-4. In view of Walter (US 3,858,029), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a vapor generator in conjunction with the previously described apparatus to enable heating the curlers both interiorly via the conducting posts and exteriorly via steam.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635), Kampel et al (US 2004/0163662), and further in view of Santhouse et al (US 2004/0118425). The claim differs from the previously cited prior art in calling for an ionization device in the chamber. But ionization devices in hair curler heating appliances are well known in the art. Santhouse et al (US 2004/0118425) discloses a hair curler heating apparatus that includes at least one ionization emitter to reduce static electricity and debris and dust buildup on the curlers. See Para. 0026. In view of Santhouse et al (US 2004/0118425), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide an ionizer in conjunction with the previously described apparatus to reduce static electricity and debris and dust buildup on the curlers.

Claims 9/1 and 10/9/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635) and further in view of Wada et al (US 3,701,882). The claims differ from the previously cited prior art in calling for the storage container to comprise a pocket for inserting the handle. Providing pockets in curler heating appliances for handheld pivotable manipulation tools, however, is well known in the art. Wada et al (US 3,701,882), for example, discloses in Fig. 7 a pocket 9 that accommodates pivoting tool B, C. Such an arrangement enables the tool to not only be conveniently stored, but also heated while not in the user's hand. In view of Wada et al (US 3,701,882), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a pocket

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to accommodate the application handle in the previously described apparatus to enable the tool to not only be conveniently stored, but also heated while not in the user's hand.

Regarding claim 10, Wada et al (US 3,701,882) discloses providing an electrically non-conducting coating C on pivoting finger A of the tool accommodated in pocket 9. Such a coating provides a heat storage medium that retains heat more effectively. See col. 2, lines 57-61. In view of Wada et al (US 3,701,882), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide an insulative coating in the previously described apparatus to enhance heat retention upon heating the tool.

Claims 9/2 and 10/9/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635), Kampel et al (US 2004/0163662), and further in view of Wada et al (US 3,701,882). The claims differ from the previously cited prior art in calling for the storage container to comprise a pocket for inserting the handle. Providing pockets in curler heating appliances for handheld pivotable manipulation tools, however, is well known in the art. Wada et al (US 3,701,882), for example, discloses in Fig. 7 a pocket 9 that accommodates pivoting tool B, C. Such an arrangement enables the tool to not only be conveniently stored, but also heated while not in the user's hand. In view of Wada et al (US 3,701,882), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a pocket to accommodate the application handle in the

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previously described apparatus to enable the tool to not only be conveniently stored, but also heated while not in the user's hand.

Regarding claim 10, Wada et al (US 3,701,882) discloses providing an electrically non-conducting coating C on pivoting finger A of the tool accommodated in pocket 9. Such a coating provides a heat storage medium that retains heat more effectively. See col. 2, lines 57-61. In view of Wada et al (US 3,701,882), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide an insulative coating in the previously described apparatus to enhance heat retention upon heating the tool.

Claims 11/1 and 12/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635) and further in view of Jorgensen (US 3,257,541). The claims differ from the previously cited prior art in calling for the hair curlers' heat store to have a temperature between 90 and 110 °C. But such temperatures for heat storage materials within heated curlers are well known in the art. Jorgensen (US 3,257,541), for example, discloses heating heat storage material 2 within heated curlers placed on heated rods to a temperature between 60° C and 130° C. See col. 3, lines 11-21. See also col. 3, line 63 – col. 4, line 11. Such an elevated temperature ensures the heat storage material approaches its latent heat of fusion. In view of Jorgensen (US 3,257,541), it would have been obvious to one of ordinary skill in the art at the time of the invention to heat the curlers of the previously described apparatus to the claimed temperature range to ensure that the heat storage

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material approaches its latent heat of fusion thus enhancing heat retention following heating.

Claims 11/2 and 12/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (US 3,705,974) in view of O'Brien et al (US 5,884,635), Kampel et al (US 2004/0163662), and further in view of Jorgensen (US 3,257,541). The claims differ from the previously cited prior art in calling for the hair curlers' heat store to have a temperature between 90 and 110 °C. But such temperatures for heat storage materials within heated curlers are well known in the art. Jorgensen (US 3,257,541), for example, discloses heating heat storage material 2 within heated curlers placed on heated rods to a temperature between 60° C and 130° C. See col. 3, lines 11-21. See also col. 3, line 63 – col. 4, line 11. Such an elevated temperature ensures the heat storage material approaches its latent heat of fusion. In view of Jorgensen (US 3,257,541), it would have been obvious to one of ordinary skill in the art at the time of the invention to heat the curlers of the previously described apparatus to the claimed temperature range to ensure that the heat storage material approaches its latent heat of fusion thus enhancing heat retention following heating.

Other Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant should (1) separately consider the art, and (2) consider the art together with the previously cited prior art for potential applicability under 35

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U.S.C. §§ 102 or 103 when responding to this action. GB 777 (claim 29) discloses a hair curler with ceramic coating. US 150, US 928, US 534, US 254, US 005, US 302, US 552, US 878, US 632, US 796, US 752 disclose curler heaters relevant to the instant invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Jeffery whose telephone number is (571) 272-4781. The examiner can normally be reached on Monday - Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans, can be reached on (571) 272-4777. All faxes should be sent to the centralized fax number at (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "John A. Jeffery", is positioned above the printed name and title.

**JOHN A. JEFFERY
PRIMARY EXAMINER**

6/1/05